



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/823,925	03/30/2001	Bradley N. Kippe	OX117	7547

7590 01/28/2004  
Mr. Edward J. Timmer  
Walnut Woods Centre  
5955 W. Main Street  
Kalamazoo, MI 49009

EXAMINER

BRINSON, PATRICK F

ART UNIT PAPER NUMBER

3752

DATE MAILED: 01/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/823,925

Applicant(s)

KIPPE ET AL.

Examiner

Patrick F. Brinson

Art Unit

3752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-7 and 9-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12 is/are allowed.
- 6) ☐ Claim(s) 1,3,5-7,9-11 and 13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2 and 9-11 are rejected under 35 U.S.C. 102(b) as being anticipated by **Tuckey et al.**

The patent to **Tuckey et al.** discloses a fuel pressure pulse damper, fig. 14, comprising a metallic body defining a chamber in which a flexible diaphragm (38) is received in a manner to dampen fuel pressure pulses between a fuel pump (284) and fuel injectors (22) of a fuel system. The damper body including a first fitting (64) for receiving pressurized fuel and a second fitting (66) for connection to a fuel rail for supplying pressurized fuel to fuel injectors (22) of the vehicle engine. The diaphragm forming a first chamber (46) that communicates to pressurized fuel entering the first fitting and exiting the second fitting and a second gas containing sealed chamber (48) on an opposite side of the diaphragm, as recited in claim 1. **Tuckey et al.** discloses the first and second housings mating together to define a chamber and to trap a

peripheral edge of the flexible diaphragm. It is also disclosed that the chamber (48) may be subjected to super atmospheric pressure by compressor (312).

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 5-7 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Murphy** in view of **Tuckey et al.**

The patent to **Murphy** discloses a fuel pulse damper, fig. 3, comprising a metallic damper body defining a chamber in which a flexible diaphragm assembly (40) is received in a manner to dampen fuel pressure pulses between a fuel pump and fuel injectors. The damper body including a first fitting (24) for receiving pressurized fuel and a second fitting (32) for connection to a fuel injector (34) of a vehicle engine. The diaphragm forming a first chamber (44) that communicates with the pressurized fuel entering the first fitting and leaving the second fitting and a second chamber (42) on the opposite side of the diaphragm. The damper including first (14) and second (18) housings that

mate together to define the chamber and to trap a peripheral edge of the flexible diaphragm assembly such that the diaphragm assembly divides the chamber into said first chamber and second chambers. The diaphragm flexes to attenuate fuel pressure pulses. The second (18) housing including second fitting (32) that is a quick connect fitting. It is disclosed as being permanently affixed to the housing. The **Murphy** patent does not disclose the second chamber as being a gas-containing sealed chamber. The patent to **Tuckey et al.** discloses a fuel pulse damper including first and second housings, as discussed in preceding paragraph # 1. **Tuckey et al.** also discloses a gas – containing sealed chamber (48) as a means of resisting the diaphragm against the incoming fuel flow. It would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute for the spring means of **Murphy** a sealed gas chamber as suggested by **Tuckey et al**, wherein it is known in the art that either of these are acceptable means of dampening the effects of pressurized fuel entering the damper. **Murphy** does not specifically disclose that the fittings are integrally or metallurgically attached to the housing, however, the method of forming the device is not germane to the issue of patentability of the device itself. Therefore, this limitation has not been given patentable weight.

***Response to Amendment***

After a review of the prior art of record, it is believed that the subject matter previously indicated as allowable, in particular, claims 3, 5-7 and 9-11 are not allowable as the recited structure is disclosed in the **Murphy** and/or the **Tuckey et al.** references. **Tuckey et al.** discloses the fuel pressure damper with the gas- containing chamber and **Murphy** discloses a fuel pressure damper with first and second fittings, the second fitting (32) including a quick connect type fitting.

***Allowable Subject Matter***

3. Claim 12 is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Patrick F. Brinson** whose telephone number is (703) 308-0111. The examiner can normally be reached on M-F 7:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Michael Y. Mar** can be reached on (703) 308-2087. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Application/Control Number: 09/823,925  
Art Unit: 3752

Page 6

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0861.



Patrick F. Brinson  
Primary Examiner  
Art Unit 3752

P. F. Brinson  
January 24, 2004